

ABSTRACT OF THE DISCLOSURE

A load dispersion-type duplex communication system
5 and duplex transmission devices are provided which are capable
of preventing a communication limitation, instantaneous
interruption, and/or break-down of communications, system-down
that cause decreases in communication quality.

Whether each of transmission devices is in an overload state
10 or in an allowable load state is judged. The transmission device
being judged to be in the allowable load state performs duplex
operation with another transmission device and the transmission
device being judged to be in the overload state performs single
and work-dividing operation with another transmission device. A
15 load detecting section notifies a controller of a result state
by comparing data storage capacity in a memory section with a
threshold value. When the transmission device is in the single
and work-dividing operation mode, low-order transmission devices
synthesize and process data.